

method of making

SEMICONDUCTOR DEVICE INCLUDING INDUCTORS AND METHOD OF

MAKING THE SAME

ABSTRACT OF THE DISCLOSURE

5 There is disclosed inductors of a semiconductor device and method of making the same.

The inductor according to the present invention includes a semicircle columnar groove formed in an insulating layer on a semiconductor device, a number of underlying conductive lines formed on the insulating layer in the shape of intersecting the groove, a columnar insulator formed on the insulating layer so that the bottom face of which contacts the number of the conductive lines, and upper conductive lines formed on the insulator in the shape of intersecting the insulator and connected to each of the number of the underlying conductive lines. As a result, according to the present invention, the change of magnetic field can be maintained constant since the inductors can be made spiral and increase of self-induction can be also facilitated since the thickness of the insulator and the positional density of the conductive lines can be freely controlled.